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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/709,808 | 05/28/2004 | Serafino Bueti | BUR920040017US1 | 3807 |
| 42640 | 7590 | 04/18/2007 | EXAMINER | |
| DILLON & YUDELL LLP 8911 NORTH CAPITAL OF TEXAS HWY SUITE 2110 AUSTIN, TX 78759 | | | LAM, KENNETH T | |
| ART UNIT | | PAPER NUMBER | | |
| 2609 | | | | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE | | |
| 3 MONTHS | 04/18/2007 | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/709,808 | BUETI ET AL. |
| | Examiner | Art Unit |
| | Kenneth Lam | 2609 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-20 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification discloses a method and apparatus for power consumptions management system for data communication. The specification discloses a transmission line as a wired connection between the sender and the receiver. For enablement requirement, the specification fails to disclose the benefit/significant of power management in a “wired” transmission line. Why power consumptions management even necessary in a wire transmission system? The specification is inadequate in explaining this need.

Claim 1 is rejected based on the given reasons. Claims 2-10 are dependent on Claim 1, hence they are also rejected. Claims 11-20 pertain to the apparatus that directly corresponds to the method of Claims 1-10. Therefore, they are also rejected base on the same given reasons.

For prior art consideration, claims 1-20 will be construed based on Examiner's best understanding.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in-
(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent; or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English.

4. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by McClenon et al, US 6,721,355 B1.

Re Claim 1, McClenon disclosed a method for managing power consumptions (adaptive power management in a modem, column 1 line 6) of a sending driver and a receiving driver (DSL Transceiver 20, figure 3), wherein said sending driver sends data received from a sender to said receiving driver via a transmission line (asymmetric digital subscriber line (ADSL), column 1 line 20), said method comprising:

Coupling a sensor (Data Traffic Predictor 120, figure 3) to said sender and said sending driver; in response to an amount of data that needed to be sent by said sender, (The method consists of monitoring a communications link for incoming data traffic,

column 4 line 12) adjusting a supply voltage level by said sensor to said sending driver accordingly; and transmitting data from said sender by said sending driver on said transmission line to said receiving driver according to said adjusted supply voltage level. (The power mode of the modem is then determined based on the determined periodicity of the incoming data traffic, column 4 line 16)

Re Claim 2, the method of Claim 1, wherein said method further includes adjusting a transmission frequency by said sensor to said sending driver according to said amount of data needed to be sent by said sender. (Where the quiescent power mode is selected, the method can also include a further step of determining a minimum data rate to which to operate the modem, column 4 line 30)

Re Claim 3, the method of Claim 2, wherein said method further includes transmitting data from said sender by said sending driver on said transmission line to said receiving driver according to said adjusted transmission frequency. (Transceiver 20 in figure 3 includes sending and receiving driver. Therefore the same reason for claim 2 rejection apply here)

Re Claim 4, the method of Claim 1, wherein said sensor includes a data level detector. (Traffic Monitor **122**, figure 4, monitors data arriving at modem 20 to determine a data arrival rate, column 7 line 53)

Re Claim 5, the method of Claim 1, wherein said sensor includes a programmable voltage regulator. (Power Mode Controller **126**, figure 4, outputs a control signal to modem 20 requesting the link power-mode it has determined is appropriate, column 7 line 61)

Re Claim 6, the method of Claim 1, wherein said sensor includes a clock frequency selector. (Periodicity Detector **124**, figure 4, processes the data arrival rate information to determine if the arriving data is periodic, or quasi-periodic)

Re Claim 7, the method of Claim 1, wherein said method further includes coupling controller to said receiving driver. (Data Traffic Predictor **120**, figure 3)

Re Claim 8, the method of Claim 7, wherein said method further includes adjusting a supply voltage level by said controller to said receiving driver according to the voltage level of data on said transmission line. (As disclosed in prior art, the receive side of modem **20** includes an automatic gain control, in block **60**, to boost signals received at hybrid **52** to defined levels, column 6 line 10)

Re Claim 9, the method of Claim 7, wherein said controller includes a pulse amplitude detector. (Traffic Monitor **122**, figure 4, monitors data arriving at modem **20** to determine a data arrival rate, column 7 line 53)

Re Claim 10, the method of Claim 7, wherein said controller includes a programmable voltage regulator. (Power Mode Controller **126**, figure 4)

Re Claims 11-20, the apparatus for the disclosed invention as defined in Claims 11-20 bear the same limitation as recited in method Claims 1-10. Therefore, Claims 11-20 are rejected for the reasons as stated for Claims 1-10. Moreover, McClenon et al disclose both the apparatus and its corresponding method (see Abstract).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a. Theodore Buot, US 7,047,018: Relates to a radio telecommunication system comprising means for determining a bit rate increase in a cell on the basis of capacity requests, means for estimating the increase of transmission power caused by the capacity increase, means for determining the cell power on the basis of the current cell power and the estimated power increase, means for estimating the increase of the transmission power needed in the neighboring cells caused by the capacity growth in the current cell, means for limiting the resource allocation in the cell requesting capacity.
 - b. Daniel M. Dreps et al, US PGPUB 2003/0086501: Pertains to a high speed signal transmission system employs differential receivers for receiving data signals transmitted over circuit transmission lines, and inter alia.
 - c. Tajana Simunic et al, "Managing Power Consumption in Networks on Chips", IEEE Transactions on very large scale integration (VLSI) systems, VL. 12, No. 1, January 2004: This paper pertains to a new methodology for managing power consumption of networks-on-chips (NOCs).

Examiner's Note

The referenced citations made in the rejection(s) above are intended to exemplify areas in the prior art document(s) in which the examiner believed are the most relevant

to the claimed subject matter. However, it is incumbent upon the applicant to analyze the prior art document(s) in its/their entirety since other areas of the document(s) may be relied upon at a later time to substantiate examiner's rationale of record. A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). However, "the prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed...." In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004).

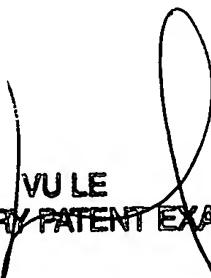
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Lam whose telephone number is (571) 270-1862. The examiner can normally be reached on Mon - Thu 7:30 am - 5:00 pm EST ALT Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on (571) 272-7332. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kenneth Lam



VULE
SUPERVISORY PATENT EXAMINER